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REMARKS

Claims 1-4 and 15-18 have been cancelled. Claims 5 and 19 have been amended to become independent. Claims 11, 23, and 26 have also been amended to correct their dependency. Claims 32-36 were previously cancelled. Claims 4 and 18 have been represented as new claims 37 and 38.

Claims 1-3 are rejected under 35 USC 103(a) as being unpatentable over PALEY et al. (US 4,888,229) in view of ROCKWELL, JR. (US 6,001,442).

Claims 1-3 have been cancelled, thereby obviating this rejection.

Claims 1-3, 11-17, and 23-31 are rejected under 35 USC 103(a) as being unpatentable over PALEY et al. (US 4,888,229) in view of LANGLEY (US 4,938,817).

Claims 1-3 have been cancelled, thereby obviating their rejection.

The PALEY reference is directed to a wiper for reducing particulate contamination, which otherwise might result from the use of the wiper in a controlled environment (such as a cleanroom), the wiper being of the type constructed at least partially from thermoplastic fabric material. The PALEY wiper has a continuous fused border in the material along the peripheral edges of the wiper that extends inwardly into the wiper to capture and retain any fibers severed during the process of cutting the fabric into wipers. Such loose fiber components are considered contaminants in a cleanroom environment, whether such fiber components originate from the edges of the wiping cloth or from some other portion thereof (e.g., as lint).

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PALEY is unambiguous in their determination that a continuous fused edge is the solution to the problem of loose fibers from the cut edges of the wiper. PALEY teaches "providing a fused border in the material along the peripheral edges of the wiper and extending inwardly into the wiper a distance great enough to provide the fused border with sufficient area and sufficient tear strength to maintain therein segments of the material of the wiper which otherwise might be released from the peripheral edges of the wiper during use of the wiper, yet small enough to maintain pliability and absorbency in the wiper for wiping procedures." (Col. 2, lines 14-22) PALEY also discloses that, within the fused border, "all of the severed segments are captured and retained throughout the useful service life of the wiper." (Col. 3, lines 32-34) The reference further provides a formula for determining the distance D that the fused area should cover ($D = 7L$, where L is the length of a relaxed loop). (Col. 3, line 47 and Col. 2, line 63)

Hence, the PALEY reference, as discussed above, fails to teach a discontinuous fused border zone with discrete fusion points formed by localized melt fusion and also fails to teach the use of a folded double layer border.

LANGLEY is related to seaming spunbonded synthetic fabric and to the preparation of cleanroom garments. The reference solves the problem of contamination by microscopic fiber particles in cleanroom environments originating from cut edges or needle holes and uses instead bonded seams that include folded-over edges. The reference teaches the use of ultrasonic energy and pressure in predetermined spaced intervals by means such as an embossed wheel having spaced sets of serially arranged raised regions or lands. Thus, the bonded area of the seam is in a discontinuous pattern.

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The Examiner believes that it would have been obvious at the time the invention was made to a person having ordinary skill in the art to modify the boundary edge of the wiper of PALEY and provide with a discontinuous pattern bonding and also with a folded double layer border with the motivation of solving the problem of contamination by microscopic fiber particles in cleanroom environments from cut edges as disclosed by LANGLEY.

Claim 1 has now been replaced by Claim 5 and Claim 15 has been replaced by Claim 19, each of which specifies that the polyester filaments used to create the low contaminant wiper are "substantially free of inorganic ionic additives, such that complete combustion of the polyester filaments yields an ash content of not greater than about 0.1% of the initial weight of said polyester filaments." Claim 29 has also been amended to recite this limitation.

Because the combination of PALEY with LANGLEY fails to teach all of the limitations of Applicants' claims and because the rejected claims depend either directly or indirectly from one of the amended independent claims, the rejection is believed to be improper. Applicants respectfully request the withdrawal of the present rejection.

* * *

Claims 4 and 18 are rejected under 35 USC 103(a) as being unpatentable over PALEY et al. (US 4,888,229) and LANGLEY (US 4,938,817) as applied above, and further in view of MORIN et al. (US 6,189,189).

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Claims 4 and 18 have been represented as new Claims 37 and 38. These claims now include the limitation (from independent Claims 5 and 19) that the polyester filaments used to create the low contaminant wiper are "substantially free of inorganic ionic additives, such that complete combustion of the polyester filaments yields an ash content of not greater than about 0.1% of the initial weight of said polyester filaments."

MORIN, which discloses a method of manufacturing a polyester textile fabric that is heat set at a temperature of 300 °F or less, does not overcome the shortcoming of the combination of PALEY with LANGLEY.

Because the combination of PALEY, LANGLEY, and MORIN fails to teach all of the limitations of Applicants' claims, the rejection is believed to be improper. Applicants respectfully request the withdrawal of the present rejection.

* * *

Claims 4, 18, and 23-25 are rejected under 35 USC 103(a) as being unpatentable over PALEY et al. (US 4,888,229) and ROCKWELL, Jr. (US 4,938,817) in view of MORIN et al. (US 6,189,189).

Claims 4 and 18 have been represented as new Claims 37 and 38. Claims 23-25 now depend from Claim 19. The rejected claims each include the limitation (from independent Claims 5 and 19) that the polyester filaments used to create the low contaminant wiper are "substantially free of inorganic ionic additives, such that complete combustion of the polyester filaments yields an ash content of not greater than about 0.1% of the initial weight of said polyester filaments."

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PALEY has been discussed above. PALEY does not suggest the use of discontinuous fused border areas. For this teaching, the Examiner relies on the disclosure of ROCKWELL, JR. ROCKWELL, JR. describes a continuous roll towel for use in a restroom facility, wherein the roll towel has ultrasonically bonded boundary edges that are discontinuous.

Applicants have argued previously that the ROCKWELL reference is non-analogous art. In the present Office Action, the Examiner has taken the position that ROCKWELL, JR. and PALEY are both directed to wiping cloths; therefore, the references are believed to be within the field of endeavor of the art.

Begging the Examiner's indulgence, Applicants would like to address this issue once more. Applicants have amended independent Claims 5, 19, and 29 to clarify that the Applicants' field of endeavor is directed to a low contaminant wiper that is comprised of a low contaminant fabric. The low contaminant fabric is made of polyester filaments that are "substantially free of inorganic ionic additives, such that complete combustion of the polyester filaments yields an ash content of not greater than about 0.1% of the initial weight of said polyester filaments."

As previously discussed, Applicants' field of endeavor is wiping cloths that meet substantially all of the specifications for use in cleanrooms. Cleanroom specifications are understandably much more stringent than those for wipers used in public restrooms, particularly regarding the amount of particulate contaminants that are acceptable. In a public restroom setting, where roll towels are typically used, particulate contaminants are of no concern. For this reason, Applicants believe that one seeking to solve the problem

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of particulate contamination would not look to the teachings of ROCKWELL, JR. to do so.

Thus, Applicants believe that there is no teaching within the references to combine elements in the manner suggested by the Examiner. One who had considered the teaching by PALEY of a cleanroom wiper with a continuous fused border would not logically turn to ROCKWELL, JR., which is directed to a continuous roll towel, for an alternative border configuration. Specifically, there is no teaching or suggestion in ROCKWELL, JR. that a discontinuous fused border would eliminate the problem of particulate contamination from the wiping cloth itself. *In re Napier*, 55 F.3d 610, 34 USPQ 2d 1782, 1784 (Fed. Circ. 1995) states, "The motivation to modify the prior art must flow from some teaching in the art that suggests the desirability or incentive to make the modification needed to arrive at the claimed invention." Applicants contend that no such teaching exists.

MORIN was discussed above as well. MORIN does not teach the use of polyester filaments that are substantially free of inorganic ionic additives. Thus, the combination of references does not teach all of the limitations of the rejected claims.

For these reasons—because the ROCKWELL, JR. reference is non-analogous art, because, even if it were not, there is no motivation to combine with PALEY, and because the combination of PALEY, ROCKWELL, JR., and MORIN does not teach all of the limitations of the claims—Applicants believe the rejection of Claims 4, 18, and 23-25 on the basis of these references is improper. Accordingly, Applicants request that the rejection be withdrawn.

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Claims 5-10 and 19-22 are rejected under 35 USC 103(a) as being unpatentable over PALEY et al., LANGLEY, and MORIN et al. as applied to Claims 1-3 and 15-17 above, and further in view of DEAN et al. (US 6,139,954).

Claims 5 and 19 are now independent claims, each of which specifies that the polyester filaments used to create the low contaminant wiper are "substantially free of inorganic ionic additives, such that complete combustion of the polyester filaments yields an ash content of not greater than about 0.1% of the initial weight of said polyester filaments."

The combination of PALEY, LANGLEY, and MORIN has been discussed above. The Examiner contends that DEAN et al. teach fiber made from polyesters used as binder fibers for nonwovens, textile, and industrial yarns and fabrics. The polyester taught by DEAN et al. does not contain any antimony catalytic materials and it teaches that these polymers are clear and non-opaque.

The Examiner has equated DEAN et al.'s polyester to the claimed polyester that is substantially free of inorganic ionic additives. Applicant believes that there is no suggestion or teaching in the references themselves to combine DEAN et al. with the other three references which were relied on to make this rejection. There is no recognition in any of the references to suggest the benefit of using polyester fibers that are substantially free of inorganic ionic additives to create a cleanroom wiper.

For these reasons, Applicants believe the rejection to be improper and respectfully requests the withdrawal thereof.

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CONCLUSION

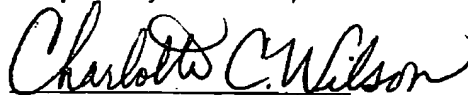
For the reasons set forth above, it is respectfully submitted that all claims now stand in condition for allowance.

Should any issues remain after consideration of this Amendment and accompanying Remarks, the Examiner is invited and encouraged to telephone the undersigned in the hope that any such issue may be promptly and satisfactorily resolved.

This response is accompanied by a Petition for Extension of Time (three months).

In the event that there are additional fees associated with the submission of these papers (including extension of time fees), authorization is hereby provided to withdraw such fees from Deposit Account No. 04-0500.

Respectfully submitted,



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